

# **MARICOPA COUNTY ENVIRONMENTAL HEALTH CODE**

## **CHAPTER II**

### **SEWAGE AND WASTES**

#### **SECTION 9**

#### **CLASSIFICATION OF WASTEWATER TREATMENT PLANTS AND REQUIREMENTS FOR CERTIFIED OPERATORS**

##### **REGULATION 1. Definitions**

- a. "Certified Operator" means an operator who holds a current certificate issued by the Arizona Department of Environmental Quality in the field of wastewater treatment, or wastewater collection.
- b. "Collection system" means pipelines, conduits, pumping stations, force mains, and all other devices, appurtenances and facilities used for collecting and conducting wastewater to a central point for treatment and disposal.
- c. "Director" means the Director of the Maricopa County Department of Health Services or his authorized agent.
- d. "Direct Responsible Charge" means day-to-day decision making responsibility for a wastewater treatment plant, collection system, or effluent distribution system, or a major portion of such a facility.
- e. "Effluent Distribution System" means the pipelines, appurtenances, devices and facilities of a reclaimed wastewater system which conduct effluent from a wastewater treatment plant to a point of final reuse.
- f. "Facility" means a wastewater treatment plant, effluent distribution system, or collection system.
- g. "On-site Operator" means an operator who visits a facility at least daily, for the purpose of ensuring that it is operating properly.
- h. "Operator" means a person who is responsible for the actual day-to-day operation of a facility or a portion thereof. This includes the operator of a remote control system in which the operator is in direct control of the entire system or a portion thereof from a central location. It also includes the chief operator who supervises the operation of the facility. The term operator includes both on-site and remote operators as defined in this section.
- i. "Population Equivalent" means the population which would contribute an equal amount of biochemical oxygen demand (BOD) computed on the basis of 0.17 pounds of five-day, 20-degree centigrade BOD per capita per day

- j. "Remote operator" means an operator who is not an on-site operator.
- k. "Wastewater Treatment Plant" means processes, devices and structures used for the purpose of treating or stabilizing wastewater or industrial waste and disposing of the effluent.

## **REGULATION 2. Exemptions**

Owners of the following facilities are exempt from the requirements of this section:

- a. "Non-Community" septic tanks and collection system discharging to "Non-Community" septic tanks.
- b. Any collection system serving a population of fewer than 2,500 persons which discharges into a facility which is operated by a certified operator.
- c. Any collection system serving a nonresident population and discharging into a collection system operated by a certified operator.
- d. Agricultural or industrial wastewater facilities used to treat, recycle, or impound industrial or agricultural wastes within the boundaries of the industrial or agricultural property.
- e. Industrial waste pretreatment facilities in which treated wastewater is released to a collection system or wastewater treatment plant which is regulated by these regulations.
- f. Facilities for treating industrial wastes which are not treatable by biological means.
- g. Wastewater treatment devices serving an individual home.

## **REGULATION 3. General Requirements**

- a. The owner or the purveyor of services shall utilize the services of a certified operator of the require classification for each facility for the purpose of assuring that the facility is operating properly. The certified operator shall have direct responsible charge of the operation of the wastewater treatment plant, or the collection or effluent distribution system. Any owner or purveyor who meets the requirements for certification may become certified as operator of the facility for which he has direct responsible charge. The Chief Operator or Superintendent in direct responsible charge shall be certified at the grade of the facility. Shift foremen or other operators in charge of the facility in the absence of the Chief Operator or Superintendent shall be certified at a grade no lower than one grade below the grade of the facility.
- b. It is the facility owner's responsibility to ensure that the name of the required certified operator is on file at all times with the Department. If the owner of a facility replaces the designated operator with another operator, the new operator shall be properly certified at the time he begins operation of the facility. The owner shall notify the Department in writing within ten days of the date of the replacement. The certified operator shall notify

the Department in writing within ten days of the date he ceases operation of a facility and within ten days after he commences operation of any facility.

c. There are three types of facilities:

- (1) Wastewater Treatment Plants,
- (2) Collection Systems, and
- (3) Effluent Distribution Systems.

All facilities shall be classified according to type of facility, population or population equivalent served, flow, and complexity of treatment as described in these regulations.

d. There are four grades of classification, with grade-4 being the highest. The Department may change the classification of a particular facility by reason of the incorporation in the facility of special features of design or characteristics more difficult to operate than usual, or by reason of wastewater unusually difficult to treat, or by reason of effluent reuse or other potential health factors. In multi-facility systems, each facility shall be classified according to complexity and the total population or population equivalent served or flow rate.

e. A person holding certification in any particular type and grade is permitted to operate all facilities in that particular type and grade and any lower grade.

f. Each facility requires the services of an on-site operator certified at the grade of the facility. An operator may operate one or more facilities as a remote operator under the following conditions:

- (1) The remote operator is certified at or above the grade of the facility.
- (2) Each facility, except a grade-1 facility, has an on-site operator certified at a level no lower than one grade below the grade of the facility. A grade-1 facility requires an on-site representative, who is not required to be certified.
- (3) The remote operator personally instructs the on-site operator or representative in proper operation and maintenance of each facility, provides him with written instructions, and assures that adequate records are kept.
- (4) The remote operator provides the on-site operator or representative with a telephone number or numbers at which he can be reached at all times.
- (5) The remote operator resides no more than three hours travel time from any facility which he serves as remote operator.
- (6) The facility operated by the remote operator is operating in compliance with all applicable regulations.
- (7) The remote operator personally inspects a facility as often as necessary to assure proper operation and maintenance, but in no case less than the following:

- (a) Grade-1 wastewater treatment plants - monthly.
  - (b) Collection systems serving fewer than 2,500 people - bimonthly.
  - (c) Grade-2 wastewater treatment plants serving less than 1,000 people - weekly.
  - (d) Grade-2 wastewater treatment plants serving greater than 1,000 people, and all grade-3 and grade-4 wastewater treatment plants - daily.
- g. The owner or the purveyor of services for any facility is in violation of this section if the facility is operated in a manner which violates County or State Rules and Regulations for the protection of water quality and the environment.

**REGULATION 4. Classification of Wastewater Treatment Plants, Collection Systems, and Effluent Distribution Systems**

- a. Treatment plants shall be classified according to population equivalent served, flow, degree of hazard to public health, type of facility and degree of treatment, as specified in this section.
  - (1) Grade-1 includes:
    - (a) Stabilization ponds serving fewer than 2,000 persons and treating a flow of 200,000 gallons per day or less.
    - (b) Any wastewater treatment facility not designated as grade-2-3, or 4.
  - (2) Grade-2 includes:
    - (a) Stabilization ponds serving more than 2,000 persons or treating a flow greater than 200,000 gallons per day, and
    - (b) All aerated lagoons, and
    - (c) All facilities employing biological treatment based upon the activated sludge principle, or trickling filters, designed to serve a population equivalent of fewer than 5,000 persons and treating a flow of 500,000 gallons per day or less, except as provided in Paragraph a.(3) (c) of this regulation.
  - (3) Grade-3 includes:
    - (a) All facilities employing biological treatment based upon the activated sludge principle designed to serve a population equivalent of 5,000 to 20,000 persons or treating a flow between 500,000 and 2,000,000 gallons per day, and
    - (b) All facilities employing trickling filtration designed to serve a population equivalent of 5,000 to 25,000 persons, or treating a flow between 500,000 and 2,500,000 gallons per day, and
    - (c) Variations of activated sludge requiring specialized knowledge including, but not limited to, contact stabilization and sequencing batch reactors

serving any population equivalent of up to 20,000 persons and treating a flow rate of up to 2,000,000 gallons per day.

(4) Grade-4 includes:

- (a) All facilities employing biological treatment based upon the activated sludge principle designed to serve a population equivalent greater than 20,000 persons, or treating a flow greater than 2,000,000 gallons per day, and
- (b) All facilities employing trickling filtration designed to serve a population equivalent greater than 25,000 persons, or treating a flow greater than 2,500,000 gallons per day.
- (c) Variations of activated sludge requiring specialized knowledge including, but not limited to, contact stabilization and sequencing batch reactors serving any population equivalent greater than 20,000 persons or treating a flow rate greater than 2,000,000 gallons per day.

(5) Facilities requiring tertiary treatment or nutrient removal shall be graded one level higher than the minimum grade based upon population equivalent or flow.

- b. Until July 1, 1991, the following classification of collection and effluent distribution systems shall apply. Ordinarily, collection and effluent distribution systems are considered as a part of the treatment facility; however, where such a conveyance facility is separated from treatment, either in jurisdiction or in responsibility, the collection and/or effluent distribution system is classified as grade 1.
- c. Classification of wastewater collection and effluent distribution systems. Effluent distribution systems shall be operated by a graded wastewater collection operator. Beginning on July 1, 1991, collection and effluent distribution systems shall be classified by population served, as follows:

GRADE	POPULATION
1	0 - 2,500
2	2,501 - 10,000
3	10,001 - 25,000
4	More than 25,000

- d. By July 1, 1991, each owner or a purveyor of services for a collection or effluent distribution system shall have the services of an operator certified at the grade of the system as reclassified under these regulations.
- e. Effluent distribution systems shall be operated by a graded wastewater collection operator.